UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/972,568	10/05/2001	Brad K. Fayette	064731.0187	5350

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ART UNIT	PAPER NUMBER
2151	

DATE MAILED: 10/17/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

	Application No.	Applicant(s)
Office Action Summary	09/972,568	FAYETTE, BRAD K.
	Examiner	Art Unit	
	KAMAL B. DIVECHA	2151	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>08 August 2006</u>.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-5,11-17 and 20-22* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-5, 11-17, 20-22* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .

5)☐ Notice of Informal Patent Application

6)☐ Other: _____.

Response to Arguments

Claims 1-5, 11-17, 20-22 are pending in this application.

Applicant's arguments with respect to claims 1-5, 11-17, 20-22 have been considered but

are moot in view of the new ground(s) of rejection. Therefore, all previous rejections has been

withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view

of Denny and Birdwell.

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the
subject matter which the applicant regards as his invention.

1.   Claims 1-5, 11-17, 20-22 are rejected under 35 U.S.C. 112, second paragraph, as being

indefinite for failing to particularly point out and distinctly claim the subject matter which

applicant regards as the invention.

Claim 1 recites:

A stateless protocol method comprising:

establishing a legacy protocol, wherein said legacy protocol defines at least one legacy

parameter for a header portion of a message, and wherein said legacy protocol defines a fixed

legacy header length;

receiving an inbound message having a header portion;
allocating a memory portion from the computer memory, said memory portion
having a depth corresponding to said fixed legacy header length;
pushing said header portion of said inbound message onto said memory portion
thereby forming a received header, wherein said header portion is truncated to form the
received header if a length of said header portion is greater than said depth of said memory
portion corresponding to said fixed legacy header length, such truncation causing any header

parameters associated with an upgraded protocol to be removed from said header portion; and;

   interpreting said received header according to said legacy protocol.

The phrase "if..." renders the claim indefinite because if the statement is false then the

claim is irrelevant.

In other words, claim seems to lack an operating step or process that enables the claim

incomplete and therefore indefinite.

The claim is considered incomplete because if the statement followed by the "If" is false,

then there is no alternative process or step involved.

Furthermore, the phrase "interpreting" in the claim renders the claim indefinite because

its unclear. For examination purposes the phrase will simply be interpreted as "processing", i.e.

processing the received header.

Claims 2-5, 11-17 and 20-22 are rejected for the same reasons as set forth in claim 1.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

2.   Claims 1-5, 11-17, 20-22 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claim 1 recites:

A stateless <u>protocol</u> method comprising:
establishing a legacy protocol, wherein said legacy protocol defines at least one legacy parameter for a header portion of a message, and wherein said legacy protocol defines a fixed legacy header length;
receiving an inbound message having a header portion;
allocating a memory portion from the computer memory, said memory portion having a depth corresponding to said fixed legacy header length;
pushing said header portion of said inbound message onto said memory portion thereby forming a received header, wherein said header portion is truncated to form the received <u>header if a length of said header portion is greater than</u> said depth of said memory portion corresponding to said fixed legacy header length, such truncation causing any header parameters associated with an upgraded protocol to be removed from said header portion; and;
<u>interpreting</u> said received header according to said legacy protocol.

The claim simply fails to disclose any utility and/or the claim fails to <u>produce any useful, concrete and tangible results</u>.

The patent laws define patentable subject matter as "<u>any new and useful process, machine, manufacture or composition of matter</u>, or <u>any new and useful improvement thereto</u>." See 35 U.S.C. § 101. When an abstract idea is reduced to a practical application, the abstract idea no longer stands alone if the practical application of the abstract idea produces a useful, concrete, and tangible result. This then satisfies the requirements of 35 U.S.C. § 101. See In re Alappat, 33 F.3d 1526, 1544, 31 U.S.P.Q.2d 1545, 1557 (Fed. Cir. 1994); see also State

Street Bank & Trust Co. v. Signature Financial Group, Inc., 149 F.3d 1368, 1373, 47

U.S.P.Q.2d 1596, 1601-02 (Fed. Cir. 1998). While an abstract idea by itself may not satisfy the

requirements of 35 U.S.C. § 101, an abstract idea when practically applied to produce a

useful, concrete, and tangible result satisfies 35 U.S.C. § 101. See AT&T Corp. v. Excel

Comm. Inc., 172 F.3d 1352, 1357, 50 U.S.P.Q. 1447, 1452 (Fed. Cir. 1999) (stating that as

technology progressed, the CCPA overturned some of the earlier limiting principles regarding

35 U.S.C. § 101 and announced more expansive principles formulated with computer

technology in mind); see also In re Musgrave, 431 F.2d 882, 167 U.S.P.Q. 280 (CCPA

1970) (cited by the Federal Circuit in AT&T Corp., 172 F.3d at 1356). Thus, producing a

useful, concrete, and tangible result is the key to patentability according to State Street and

other applicable case law.

Independent claims 11, 15 and 20 are rejected for the same reasons a set forth in claim 1.

3.   Claims 1-5, 11-17, 20-22 are rejected under 35 U.S.C. 101 because the claimed invention

lacks patentable utility.

Claim 1 recites:

A stateless protocol method comprising:
establishing a legacy protocol, wherein said legacy protocol defines at least one legacy
parameter for a header portion of a message, and wherein said legacy protocol defines a fixed
legacy header length;
receiving an inbound message having a header portion;
allocating a memory portion from the computer memory, said memory portion
having a depth corresponding to said fixed legacy header length;
pushing said header portion of said inbound message onto said memory portion
thereby forming a received header, wherein said header portion is truncated to form the
received header if a length of said header portion is greater than said depth of said memory
portion corresponding to said fixed legacy header length, such truncation causing any header
parameters associated with an upgraded protocol to be removed from said header portion;
and;
interpreting said received header according to said legacy protocol

The claim fails to disclose any practical application, i.e. usefulness and/or the utility of the invention.

The steps in the body of the claim are merely the process steps involved in the invention, however they do not indicate any useful utility.

Applicant is advised to include the utility (problem to be solved) in the preamble of the claim making the claim more practical in achieving the intended invention, which the applicant regards as the invention.

Independent claims 11, 15 and 20 are rejected for the same reasons a set forth in claim 1.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
> such that the subject matter as a whole would have been obvious at the time the invention was made to a person
> having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the
> manner in which the invention was made.

4.   Claims 1, 2, 4, 5, 11-14, 15, 16, 20-22 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Denny et al. (hereinafter Denny, US 5,544,325) in view of Birdwell et al.

(U.S. Patent No. 6,032,197).

As per claim 11, Denny discloses a stateless protocol method comprising:

establish a legacy protocol, wherein said legacy protocol defines at least one legacy

parameter for a header portion of a message (read as fragment field or any other field associated

with the header), and wherein said legacy protocol defines a fixed legacy header length (fig. 3

and fig. 4: indicates the communication between the sender and receiver utilizing the

communication protocol);

receiving and inbound message having a header portion (fig. 4 item #62);

allocating a memory portion from the computer memory, said memory portion having a

depth corresponding to said fixed legacy header length (fig. 4 item #70);

pushing said header portion of said inbound message onto said memory portion thereby

forming a received header (fig. 4 item #72, 74), wherein said pushing said header portion

comprises retaining the unrecognized fields associated with the header portion (i.e. parameters

associated with the upgraded protocol system, fig. 4 item #76, 80);

dynamically allocating the memory space or stack if a length of said header portion is greater than said depth of said memory space corresponding to fixed legacy header length (fig. 4 item #70);

interpreting said received header according to said legacy protocol (fig. 4 and col. 7 L6 to col. 8 L45);

constructing a legacy header according to said legacy protocol (fig. 3 item #52; fig. 4 item #82);

appending said legacy header to outbound data thereby creating an outbound message (fig. 3 item #52; fig. 4 item #82); and

sending said outbound message (fig. 3 item #61; fig. 4 item #82, 84, 88).

However, Denny does not disclose the process of wherein said header portion is truncated to form the received header if a length of said header portion is greater than said depth of said memory portion corresponding to said fixed legacy header length, such truncation causing any header parameters associated with an upgraded protocol to be removed from said header portion.

Birdwell, from the same field of endeavor discloses the process of truncating and/or compressing the header portion of a packet to form a received header such truncation causing any header parameters associated with the protocol to be removed from header portion (col. 2 L48-60, col. 5 L20-41).

Therefore it would have been obvious to one of ordinary skilled in the art at the time the invention was made to modify Denny in view of Birdwell in order to compress or truncate the extra or upgraded parameters associated with the upgraded protocol, such truncation causing any extra parameters to be removed from the header portion.

One of ordinary skilled in the art would have been motivated because it would have ensured compatibility, i.e. interoperability, of transaction processing for all computer systems having same or different version of the communication protocol (Denny, col. 1 L44 to col. 2 L2).

As per claim 12, Denny discloses the process as in claim 11 further comprising establishing said upgraded protocol, wherein said upgraded protocol includes said at least one legacy parameter of said legacy protocol, wherein said upgraded protocol defines at least one upgraded header parameter, and wherein said upgraded protocol defines a fixed upgraded header length (fig. 2 and col. 5 L19 to col. 6 L45); wherein said memory portion has depth corresponding to said upgraded header length (fig. 4), wherein said received header of said inbound message is interpreted according to said upgraded protocol if at least one upgraded header parameter is pushed on the memory stack (fig. 4); wherein said received header of inbound message is interpreted according to said legacy protocol if no upgraded header parameters are pushed on the memory stack; constructing an upgraded header according to said upgraded protocol; and appending said upgraded header to outbound data (fig. 4).

As per claim 13, Denny discloses the process further comprising pushing legacy parameters onto said portion before said upgraded parameter is pushed onto said memory portion (fig. 4 item 72 and item #80).

As per claim 14, Denny discloses the process further comprising receiving inbound message from an upper layer application having a header portion in an upper layer format and sending said outbound message to a lower layer application (fig. 3 and fig. 4).

As per claim 4, Denny discloses the process wherein legacy parameter comprises a value-type pair (col. 5 L25 to col. 6 L38 and fig. 2).

As per claim 5, Denny discloses the process wherein said inbound message includes data portion and wherein said header portion is pushed onto said memory after said data portion (fig. 4).

As per claims 1, 2, 15, 16, 20-22, they do not teach or further define over the limitations in claims 11-14, 4, and 5. Therefore claims 1, 2, 15, 1, 20-22 are rejected for the same reasons as set forth in claims 11-14, 4 and 5.

5.   Claims 3 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Denny et al. (hereinafter Denny, US 5,544,325) in view of Birdwell et al. (U.S. Patent No. 6,032,197) and further in view of Taylor (U.S. Patent No. 5,206,822).

As per claim 3, Denny in view of Birdwell does not disclose the process of padding said memory portion with default padding values when said header portion of said inbound message does not fill said memory portion.

Taylor explicitly discloses method and apparatus for optimized processing of sparse matrices. Taylor further teaches a storage scheme where the memory is padded with zeros (read as default padding) (col. 3 L34-55).

Therefore it would have been obvious to a person of ordinary skilled in the art at the time the invention was made to modify Denny in view of Birdwell and further in view of Taylor in order to pad the memory with default values.

One of ordinary skilled in the art would have been motivated so that an efficient storage scheme is achieved and where there is structured data access (Taylor, col. 6 L49-58).

As per claim 17, it does not teach or further define over the limitations in claim 3. Therefore claim 17 is rejected for the same reasons as set forth in claim 3.

Additional References

The prior art made of record and not relied upon is considered pertinent to applicant's

disclosure.

a.   Muller et al., US 6,453,360 B1: High Performance Network Interface.

b.   Ahlers et al., US 6,085,203: Converting data formats which differ from one

another.

c.   Pathakis et al., US 5,946,467: Application-level, persistent packeting apparatus.

Conclusion

Please note: the instant office action is made non-final in order that Applicant may

properly respond on the record and submit any necessary amendment to the claims.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to KAMAL B. DIVECHA whose telephone number is 571-272-

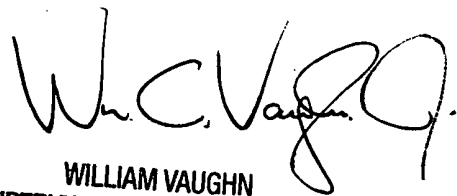5863. The examiner can normally be reached on Increased Flex Work Schedule.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Zarni Maung can be reached on 571-272-3939. The fax phone number for the

organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

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like assistance from a USPTO Customer Service Representative or access to the automated

information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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Art unit 2151
October 15, 2006.

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